

REMARKS

The Examiner's Action mailed on June 30, 2006, has been received and its contents carefully considered. Additionally attached to this Amendment is a Petition for a Three-month Extension of Time, extending the period for response to December 30, 2006, together with the requisite fee. Also attached to this Amendment is the fee for one additional independent claim in excess of three.

In this Amendment, Applicant has amended claims 3, 6 and 23. Claims 1, 3, 6 and 23 are the independent claims, and claims 1-10, 21-25 and 27 are pending in the application. For at least the following reasons, it is submitted that this application is in condition for allowance.

The Examiner's Action has rejected the claims as being obvious over *Kim* in view of *Koike*, *Fournel*, and newly cited *Mizuno*. It is submitted that these claims are all *prima facie* distinguishable over the cited references, for at least the following reasons.

As noted in Applicant's last-filed Amendment, the subject matter of which is incorporated herein by reference, neither *Kim*, nor *Koike*, nor *Fournel*, disclose or otherwise suggest Applicant's claimed semiconductor device which includes a first conductive region having a plurality of conductive layers, as well as first and second electrode pads which have a conductive line, which includes the first conductive region, extending therebetween. The Examiner's Action appears to acknowledge that neither *Kim*, nor *Koike*, nor *Fournel* disclose or suggest this feature, and thus also relies on the teaching of the newly cited *Mizuno* reference.

However, *Mizuno* discloses a semiconductor integrated circuit which includes a single layer TaN 15 which is used as a fuse, and which extends between aluminum pads 16. This reference also discloses that the single layer TaN is disposed on top of a plurality of insulating layers, and further discloses that a glass coating layer 17 can be formed over the TaN layer 15, as well as over the aluminum pads 16. The Examiner's Action contends that this TaN layer 15 together with the glass coating layer 17 constitutes a more layered section, and contends that this disclosure overcomes the deficiencies of the other cited references. However, it is noted that Applicant's independent claim 1 specifically recites that the first conductive region, which is the multi-layered structure, includes a plurality of conductive layers with an insulating layer disposed therebetween. Even assuming *arguendo* that the layer 17 and the layer 15 could be construed as a multi-layered structure, this so-called multi-layered structure is not equivalent to Applicant's claimed multi-layered structure, as it does not comprise a plurality of conductive layer having an insulating layer disposed therebetween. Furthermore, it is respectfully submitted that one skilled in the art presented with the teachings from this reference, would not view the layer 17 and the layer 15 as being a multi-layered structure in the manner recited by Applicant's independent claim 1. That is, this reference specifically recites that it is important that the TaN layer be a single layer (see column 3, paragraph number 46). Thus, not only does this reference not disclose or suggest Applicant's claimed multi-layered structure, which comprises a plurality of conductive layers and an

insulating layer disposed in between, but this reference specifically teaches away from such a configuration, due to the importance of the fuse being a single layer, as discussed in this reference. As such, it is respectfully submitted that Applicant's independent claim 1, and the claims dependent therefrom, are patentably distinguishable over the cited references.

Moreover, Applicant's independent claim 3 is submitted to be *prima facie* patentably distinguishable over the cited references for at least the reasons presented above with respect to independent claim 1, as well as for at least the following additional reasons.

Claim 3 recites that the second conductive region is formed as an uppermost layer. Initially, it is noted that the Examiner's Action has yet to address this feature, in either this or any of the previous Office Actions. Moreover, although the Examiner's Action did rely on the *Fournel* patent as teaching that the fuse layer may be formed near the top of the fuse structure, it is noted that this reference specifically recites that the fusible strips 2 are buried in layers of dielectric material, as discussed in paragraph number 23 of this patent, and thus does not disclose or suggest that the second conductive region is formed as an uppermost layer. Further, the newly cited *Mizuno* reference does not overcome this deficiency. It is thus requested that this claim, as well as the claims dependent therefrom, be allowed.

Furthermore, Applicant's independent claim 6 is submitted to be *prima facie* patentably distinguishable over the cited references for at least the same reasons

as independent claim 1, as discussed above, as well as for at least the following additional reasons.

This claim recites that a length of the second conductive region along the conductive line is formed to be not larger than a double width of the conductive line. Again, the Examiner's Action has not addressed this feature. Furthermore, none of the cited references disclose or otherwise suggest this feature. It is thus requested that this claim also be allowed.

Moreover, Applicant's independent claim 23 is submitted to be *prima facie* patentably distinguishable over the cited references for at least the same reasons as independent claim 1, as discussed above, as well as for at least the following additional reasons.

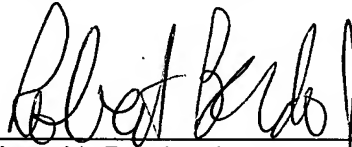
Claim 23 recites that the second conductive region is an upper layer that is suspended over the semiconductor substrate. The Examiner's Action had relied on the teachings of *Koike* as disclosing a bridge structure, in the earlier Office Actions. However, this so-called bridge structure does not include a region that is suspended, much less suspended over a semiconductor substrate, as recited by claim 23. Instead, the center portions of the so-called bridge structures are fully supported by the layer of the material thereunder, so that there is no suspension of this feature what-so-ever. It is thus requested that this claim, and the claims dependent therefrom, be allowed. It is further requested that these rejections be withdrawn.

It is submitted that this application is in condition for allowance. Such action and the passing of this case to issue are requested.

Should the Examiner feel that a conference would help to expedite the prosecution of this application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

Should the remittance be accidentally missing or insufficient, the Commissionaire is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,



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Date

Robert H. Berdo, Jr.
Registration No. 38,075
RABIN & BERDO, PC
Customer No. 23995
Telephone: 202-371-8976
Fax: 202-408-0924

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